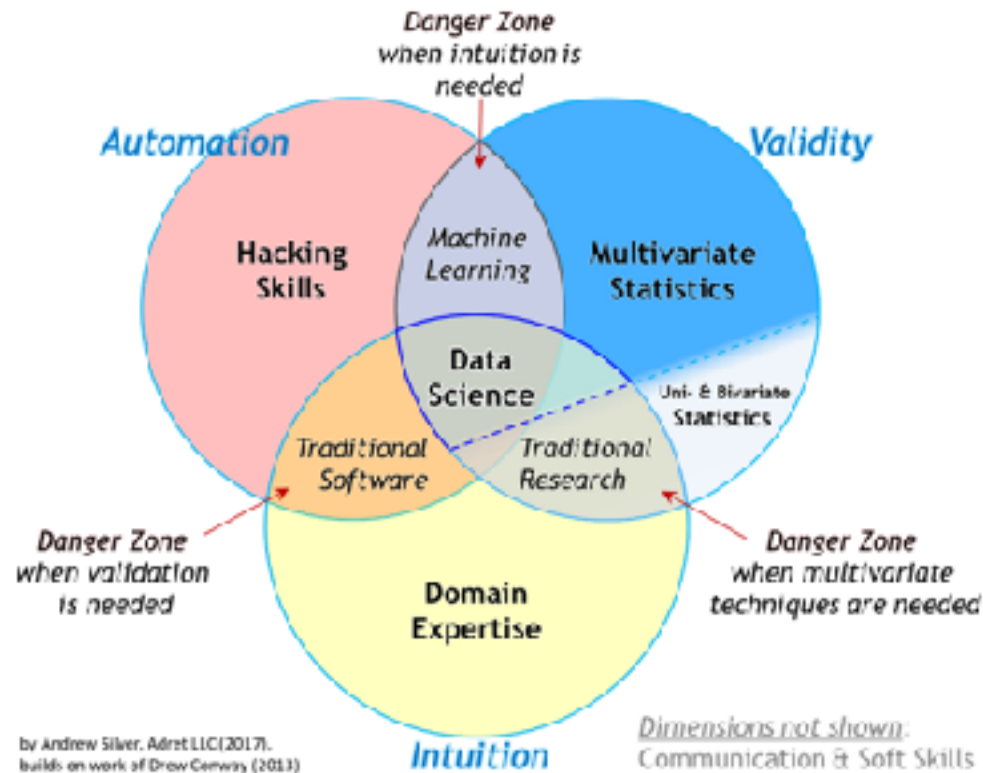


Data Analysis and Machine Learning using Python

Lecture 2: Developing intuition for data statistics
March 16 2024

Statistics is one of three cornerstones of data science



Not a formal introduction to mathematical foundations of statistics, but start to develop intuition about uncertainties, noise and information in data

Today

- Slightly different format - instead of slides we will go through a set of Jupyter notebooks
- They are uploaded on the class website for Lecture 2. You can follow online, but also run the notebook for yourself
- 5 topics (we'll continue next week if we can't get through all five)
 - Abstraction and functions
 - Quick intro to statistics and uncertainties
 - Plotting with Matplotlib
 - Fitting with Scipy optimize
 - An analysis example